

In the claims:

1. (Currently Amended) An essentially purified neurotrophin of carp, carp NT-7 having neurotrophic activity and an amino acid sequence comprising SEQ ID NO. 1, as follows:

~~Lys-Ala-Asn-Asp-Phe-Leu-His-Arg-Gly-Glu-Tyr-Ser-Val-Cys-Asp-Ser-Glu-Glu-His-Trp-Val-Gly-Asn-Leu-Thr-Gln-Ala-Thr-Asp-Leu-Arg-Gly-Asn-Glu-Val-Thr-Val-Leu-Pro-His-Val-Arg-Ile-Asn-Asn-Val-Val-Lys-Lys-Gln-Met-Phe-Tyr-Glu-Thr-Thr-Cys-Arg-Val-Ser-Lys-Pro-Ile-Gly-Ala-Pro-Lys-Pro-Gly-Gln-Gly-Val-Ser-Gly-Val-Ser-Gly-Val-Lys-Ala-Gly-Thr-Ser-Ser-Cys-Arg-Gly-Ile-Asp-Asn-Glu-His-Trp-Asn-Ser-Tyr-Cys-Thr-Asn-Val-His-Thr-Phe-Val-Arg-Ala-Leu-Thr-Ser-Tyr-Lys-Asn-Gln-Ile-Ala-Trp-Arg-Phe-Ile-Arg-Ile-Asn-Ala-Ala-Cys-Val-Cys-Val-Leu-Ser-Arg-Asn-Ser-Trp-Arg-His (SEQ ID NO: 1) or functional variants, analogues and functional fragments of NT-7.~~

2. (Previously Withdrawn) A nucleic acid sequence comprising:

~~AAGGCCAACGACTTCTTGCATCGCGGCGAGTACTCTGTGTGTGACAGCGAAGA
GCACTGGGTTGGCAACCTGACCCAAGCCACAGACTTACGGGGCAATGAAGTCA
CGGTGCTGCCACATGTTGGCATCAACAACGTGGTGAAGAAGCAGATGTTCTAC
GAGACCACGTGCGGTGTGTGCGAAGGCCATCGGGGGCCCCCAAGCGGGGTCAAG
GAGTCAGCGGCGTTAAAGCAGGAACCTCTAGCTGTCTGTGGGATCGACAACGAG
CACTGGAAGTCTTATTGCACCAACGTGCACACCTTTGTGCGGGCGTTAACGTCC
TACAAAAACCAGATTGCCCTGGAGGTTTCATCCGAATCAACGGCCGCTTGGGTGTG
CGTCCTCAGCGGCAACTCATGGAGGCAT~~

~~Said nucleic sequence including degenerate versions of the sequence and including nucleic acid sequences that hybridise under stringent conditions to said nucleic acid sequences and encode NT-7.~~

3. (Currently Amended) A composition comprising of an essentially purified neurotrophin of carp, carp NT-7 having neurotrophic activity, comprising:

a carrier; and

an amino acid sequence comprising SEQ ID NO. 1, as follows: ~~Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Glu His Trp Val Gly Asn Leu Thr Gln Ala Thr Asp Leu Arg Gly Asn Glu Val Thr Val Leu Pro His Val Arg Ile Asn Asn Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val Ser Gly Val Lys Ala Gly Thr Ser Ser Cys Arg Gly Ile Asp Asn Glu His Trp Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val Arg Ala Leu Thr Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala Ala Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His (SEQ ID NO:1) or functional variants, analogues and functional fragments of NT-7.~~

4. Cancel.

5. (Previously Withdrawn) ~~The use of an essentially purified Neurotrophin NT 7 having neurotrophic activity and an amino acid sequence as follows:~~

~~Lys Ala Asn Asp Phe Leu His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Glu His Trp Val Gly Asn Leu Thr Gln Ala Thr Asp Leu Arg Gly Asn Glu Val Thr Val Leu Pro His Val Arg Ile Asn Asn Val Val Lys Lys Gln Met Phe Tyr Glu Thr Thr Cys Arg Val Ser Lys Pro Ile Gly Ala Pro Lys Pro Gly Gln Gly Val Ser Gly Val Lys Ala Gly Thr Ser Ser Cys Arg Gly Ile Asp Asn Glu His Trp Asn Ser Tyr Cys Thr Asn Val His Thr Phe Val Arg Ala Leu Thr Ser Tyr Lys Asn Gln Ile Ala Trp Arg Phe Ile Arg Ile Asn Ala Ala Cys Val Cys Val Leu Ser Arg Asn Ser Trp Arg His~~

~~or functional variants, analogues and functional fragments of NT-7 in the identification of additional members of the neurotrophin family.~~

6-9. (Previously Cancelled)

10. (New) The neurotrophin according to claim 1, wherein the amino acid sequence identifies a functional variant of SEQ. ID. NO. 1 that increases survival and neurite outgrowth of embryonic chick DRG neurons.

11. (New) The composition according to claim 3, wherein the amino acid sequence identifies a functional variant of SEQ. ID. NO. 1 that increases survival and neurite outgrowth of embryonic chick DRG neurons.